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EXAMINER				
RALIS, STEPHEN J				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,462

Applicant(s)

INOUE ET AL.

Examiner

Stephen J. Ralis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/ISD/IC)
Paper No(s)/Mail Date 4/22/2005 and 8/16/2007
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

Priority

1. Applicant's claim for foreign priority benefit of Japanese Application No. 2002-307059, filed 22 October 2002, is acknowledged.
2. If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 119(e), a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

If the instant application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim

filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Information Disclosure Statement

3. The information disclosure statement filed 16 August 2007 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

In the instant case, there is no English equivalency document included.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "56" and "58" have both been used to designate stopper. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the joisted-locating jig" in lines 10-11, 12-13; and "another joisted-locating jig" in line 14. There is insufficient antecedent basis for this limitation in the claim. It is unclear to the examiner the relationship between "a plurality of movable joisted-locating jigs" and "the joisted-locating jig" or "another joisted-locating jig". Further clarification is required to either provide sufficient antecedent basis or to distinguish the elements from the previously recited element.

In general, the claims are replete with such 35 U.S.C. 112, second paragraph issues. The above notes are exemplary with respect to all of the 35 U.S.C. 112, second paragraph rejections present in the instant case, all claims must be carefully reviewed and appropriate corrections should be made in response to this rejection.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 2 are rejected under 35 U.S.C. 102(a) as being anticipated by Motomi et al. (U.S. Patent No. WO 03/039941 A1; Note: U.S. Publication No. 2005/0017057 used for US equivalency).

Motomi et al. disclose a method of assembling a car body by spot welding a bridging part (roof 31) to a pair of side members (4) fixed to an underbody (3) of a car, the method comprising the steps of: installing a pair of frames (suspension frames 34) at sides of a transfer line for transferring the underbody (3) and the side members (4); attaching a plurality of movable joisted-locating jigs (35, 36) to the frame (34) for locating the side members (4) and the bridging part (roof 31); and spotwelding the side members (4) to the bridging part (roof 31), with the side members (4) and the bridging part (roof 31) clamped by the joisted-locating jigs (35, 36) (page 6, paragraph 54 -page 7, paragraph 65; see Figures 9-12); wherein a transfer system (see Figure 12) is employed to convey the joisted-locating jig (35, 36) from the frame (34) first stock area (42-1) and to convey another joisted-locating jig (35, 36) from a second stock area (42-2) to the frame (34) for performing a joisted-locating jig change (see Figure 12).

With respect to the limitations of claim 2, Motomi et al. disclose the frame (34) and the joisted-locating jig (35, 36) being located and fixed by a clamp mechanism

(transporter robots 37-1, 37-2 having clamp mechanism to grab, move and position the suspension jigs 35, 36).

As the reference meets all material limitations of the claims at hand, the reference is anticipatory.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

9. Claims 1 and 2 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by McNamara et al. (U.S. Patent No. 6,595,407).

McNamara et al. disclose a method of assembling a car body by spot welding a bridging part to a pair of side members fixed to an underbody of a car (roof, floor and side body, column 1, lines 17-19; sub-elements; column 2, lines 29-43; column 3, lines 60-63), the method comprising the steps of: installing a pair of frames (lifter housing 42 being tooled with supporting beams 26; column 4, lines 27-51) at sides of a transfer line for transferring the underbody (not shown) and the side members (not shown); attaching a plurality of movable joisted-locating jigs (framing pair 18 having framing gates 20) to the frame ((lifter housing 42 being tooled with supporting beams 26) for locating the side members (not shown) and the bridging part (not shown); and spotwelding (welding) the side members (not shown) to the bridging part (not shown), with the side members (not shown) and the bridging part (shown) clamped by the joisted-locating jigs (framing pair 18 having framing gates 20) (column 2, lines 43-49; column 3, line 56 – column 8, line

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52); wherein a transfer system (framing station 12) is employed to convey the joisted-locating jig (one of framing gates 20 of the framing pair 18) from the frame (lifter housing 42 being tooled with supporting beams 26) to a first stock area (one side of the assembly line) and to convey another joisted-locating jig (one of framing gates 20 of the framing pair 18) from a second stock area (one side of the assembly line) to the frame (lifter housing 42 being tooled with supporting beams 26) for performing a joisted-locating jig change (whole document).

With respect to the limitations of claim 2, McNamara et al. disclose the frame (lifter housing 42 being tooled with supporting beams 26) and the joisted-locating jig (one of framing gates 20 of the framing pair 18) being located and fixed by a clamp mechanism (framing station 12 having clamp mechanism to grab, move and position the framing gates 20).

As the reference meets all material limitations of the claims at hand, the reference is anticipatory.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Joint Inventors – Common Ownership Presumed

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNamara et al. (U.S. Patent No. 6,595,407) in view of Kozai (Japanese Publication No. JP 62110580A) and Wood et al. (U.S. Patent No. 5,972,112).

McNamara et al. disclose all of the limitations of the claimed invention, as previously set forth, except for the transfer system including a motor, a movable rail moved up and down by the motor, a fixed rail to be combined with the movable rail, and

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a pulley movable along the movable rail and the fixed rail, the joisted-locating jig being hung from the pulley; a sway prevention mechanism being furnished for preventing the movable rail from swaying when the movable rail and the fixed rail are disconnected; and the sway prevention mechanism including a pair of vertical rods attached to the movable rail and a pair of fixed guides fixed to an immovable structure, the vertical rods being movable relative to the fixed guide via a roller.

However, a transfer system including a motor, a movable rail moved up and down by the motor, a fixed rail to be combined with the movable rail, the joisted-locating jig being hung from the movable rail; a sway prevention mechanism being furnished for preventing the movable rail from swaying when the movable rail and the fixed rail are disconnected; and the sway prevention mechanism including a pair of vertical rods attached to the movable rail and a pair of fixed guides fixed to an immovable structure is known in the art. Kozai, for example, teaches a car assembly method comprising a motor (lift cylinder 23 having a motor), a movable rail (15a) moved up and down by the motor (see Figure 1), a fixed rail (15) to be combined with the movable rail (see Figure 1), the joisted-locating jig (19) being hung from the movable rail (15a); a sway prevention mechanism (vertical rods on each side of lifting cylinder 23) being furnished for preventing the movable rail from swaying when the movable rail and the fixed rail are disconnected (see Figure 1); and the sway prevention mechanism including a pair of vertical rods (see Figure 1) attached to the movable rail and a pair of fixed guides (structure above vertical rods) fixed to an immovable structure. Kozai further teaches the advantage of such a configuration provides a means to simplify

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equipment for assembly for multiple parts by utilizing one loader, thereby reducing the loaders required to be used (English translation; Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McNamara et al. with the overhead trolley loader configuration of Kozai in order to provide a means to simplify equipment for assembly for multiple parts by utilizing one loader, thereby reducing the loaders required to be used.

McNamara et al. in view of Kozai discloses all of the claimed limitations, as previously set forth, except for a pulley movable along the movable rail and the fixed rail, the joisted-locating jig being hung from the pulley.

However, a pulley attached to a movable frame/carrier and vertical rods being movable relative to a fixed guide via a roller is known in the art. Wood et al., for example, teach a pulley system (cable 44, pulley 40 and winches 44, 48) on movable carrier (column 2, lines 55 – column 3, line 1). Wood et al. further teach the advantage of such a configuration provides the ability to selectively operate together the pulley systems, providing the ability to raise and lower the movable rail based on desired location, thereby increasing the overall versatility of the trolley locator. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the trolley locator of the McNamara-Kozai combination with the pulley system on the lower part of Wood et al. in order to provide the ability to selectively operate together the pulley systems, providing the ability to raise and lower the movable rail based on desired location, thereby increasing the overall versatility of the trolley locator.

McNamara et al. in view of Kozai and Wood et al. discloses all of the claimed limitations, as previously set forth, except for the vertical rods being movable relative to the fixed guide via a roller.

With respect to claim 5, moving a vertical rods relative to a fixed guide via a roller, e.g. does not patentably distinguish the claimed invention from the prior art, because this has long been the conventional (well-known) manner of providing controlled motion in a vertical direction along a vertical rod, as evidenced by the use of guide rails and rollers in elevator shafts,. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the vertical guide rods of the McNamara et al. in view of Kozai and Wood et al. combination with rollers to move the vertical guide rods relative to a fixed guide since it was known in the art moving a vertical rods relative to a fixed guide via a roller provides controlled motion, thereby increasing the operational safety of the device.

14. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNamara et al. (U.S. Patent No. 6,595,407) in view of Kozai (Japanese Publication No. JP 62110580A) and Wood et al. (U.S. Patent No. 5,972,112) as applied to claims 3 and 4 above, and further in view of Japanese Publication (JP53-151007U).

McNamara et al. in view of Kozai and Wood et al. discloses all of the claimed limitations, as previously set forth, except for a fall prevention mechanism being provided at the movable rail for preventing the pulley from falling out of the movable rail; the fall prevention mechanism including a stopper that turns on the predetermined pivot,

the stopper being movable between a position at which the stopper engages with the pulley and a position at which the stopper is disengaged from the pulley.

However, a fall prevention mechanism for preventing the pulley from falling out of the movable rail including a stopper that turns on the predetermined pivot, the stopper being movable between a position at which the stopper engages with the pulley and a position at which the stopper is disengaged from the pulley is known in the art. JP53-151007, for example, teaches a stopper device comprising a fall prevention mechanism (arms 6a, 6b of 6) for preventing the pulley (wheel 8) from falling of the movable rail (1). JP53-151007 further teaches the advantage of such a configuration prevents the moving vehicle from being disengaged from the rails, thereby increasing the operational safety of the trolley mechanism (page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the trolley locator of the McNamara-Kozai-Wood combination with the stopper device of JP53-15007U in order to provide a means to configuration prevents the moving vehicle from being disengaged from the rails, thereby increasing the operational safety of the trolley mechanism.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Ralis whose telephone number is 571-272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J Ralis/
Examiner, Art Unit 3742

/TU B HOANG/
Supervisory Patent Examiner, Art Unit 3742

Stephen J Ralis
Examiner
Art Unit 3742

SJR
April 24, 2008